

SGCN and Stressors Associated with Habitats

Macrogroup: Subtidal Mud Bottom

Habitat Systems within Macrogroup:

MacrogroupName Subtidal Mud Bottom

Mud Bottom Macrogroup - Unknown Habitat System (i.e. Macrogroup)

Submerged Aquatic Vegetation

Unvegetated

Description: The Mud Bottom Macrogroup is composed of 90% or more Mud (particles less than 0.0625 millimeters in diameter); the remainder (< 10%) is composed of Sand. The bottom is submerged during the entire tidal cycle. Adopted from CMECS Substrate Components. This category is equivalent to CMECS Substrate Class-Fine Unconsolidated shore, Substrate-Mud. This includes particle size silt, silt-clay, and clay.

SGCN Associated With This Habitat

Total SGCN: 1: 6 2: 17 3: 7

| Class | <i>Actinopterygii</i> (Ray-finned Fishes) | SGCN Category |
|---------|--|---------------|
| Species | <i>Anguilla rostrata</i> (American Eel) | 2 |
| Species | <i>Acipenser oxyrinchus</i> (Atlantic Sturgeon) | 1 |
| Species | <i>Osmerus mordax</i> (Rainbow Smelt) | 1 |
| Species | <i>Acipenser brevirostrum</i> (Shortnose Sturgeon) | 1 |
| Species | <i>Anarhichas minor</i> (Spotted Wolffish) | 3 |
| Species | <i>Pseudopleuronectes americanus</i> (Winter Flounder) | 2 |
| Class | <i>Anthozoa</i> (Corals, Sea Pens, Sea Fans, Sea Anemones) | SGCN Category |
| Species | <i>Alcyonium digitatum</i> (Dead Man's Fingers) | 3 |
| Species | <i>Gersemia rubiformis</i> (Sea Strawberry) | 2 |
| Class | <i>Asteroidea</i> (Sea Stars) | SGCN Category |
| Species | <i>Solaster endeca</i> (Purple Sunstar) | 2 |
| Class | <i>Aves</i> (Birds) | SGCN Category |
| Species | <i>Bucephala islandica</i> (Barrow's Goldeneye) | 1 |
| Species | <i>Ardea herodias</i> (Great Blue Heron) | 2 |
| Species | <i>Aythya marila</i> (Greater Scaup) | 2 |
| Class | <i>Bivalvia</i> (Marine And Freshwater Molluscs) | SGCN Category |
| Species | <i>Zirfaea crispata</i> (Atlantic Great Piddock) | 2 |
| Species | <i>Mytilus edulis</i> (Blue Mussel) | 3 |
| Species | <i>Crassostrea virginica</i> (Eastern Oyster) | 3 |
| Species | <i>Mercenaria mercenaria</i> (Hard-shelled Clam) | 3 |
| Species | <i>Mya arenaria</i> (Softshell Clam) | 3 |
| Class | <i>Chondrichthyes</i> (Sharks, Rays, And Skates) | SGCN Category |
| Species | <i>Dipturus laevis</i> (Barndoor Skate) | 2 |
| Species | <i>Malacoraja senta</i> (Smooth Skate) | 2 |
| Species | <i>Amblyraja radiata</i> (Thorny Skate) | 2 |
| Species | <i>Leucoraja ocellata</i> (Winter Skate) | 2 |
| Class | <i>Gastropoda</i> (Aquatic And Terrestrial Snails) | SGCN Category |
| Species | <i>Arrhoges occidentalis</i> (American Pelican Foot) | 2 |
| Species | <i>Boreotrophon clathratus</i> (Clathrate Trophon) | 2 |
| Species | <i>Colus pygmaeus</i> (Colus Snail) | 2 |
| Species | <i>Boreotrophon truncatus</i> (Murex) | 2 |

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| | | |
|---------|--|---------------|
| Species | <i>Limneria undata</i> (Wavy Lamellaria) | 3 |
| Class | <i>Malacostraca</i> (Crustaceans) | SGCN Category |
| Species | <i>Pandalus borealis</i> (Northern Shrimp) | 1 |
| Species | <i>Lebbeus polaris</i> (Polar Lebbeid Shrimp) | 2 |
| Species | <i>Lebbeus groenlandicus</i> (Spiny Lebbeid Shrimp) | 2 |
| Class | <i>Merostomata</i> (Horseshoe Crabs And Sea Scorpions) | SGCN Category |
| Species | <i>Limulus polyphemus</i> (Horseshoe Crab) | 1 |

Endangered (E) and Threatened (T) Plant Species Associated With This Habitat: None assigned

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Stressors Associated With This Macrogroup

IUCN Level 2 Threat Name: Agricultural and Forestry Effluents

Notes: Though this threat can be reduced with the implementation of best management practices, in coastal watersheds, runoff can lead to non-point source pollution of nutrients, fertilizer, sediments, pesticides, vehicle contaminants, etc., which can lead to poor

IUCN Level 2 Threat Name: Domestic and Urban Waste Water

Notes: Though this threat can be reduced with the implementation of best management practices, in coastal watersheds, runoff can lead to non-point source pollution of nutrients, fertilizer, sediments, pesticides, vehicle contaminants, etc., which can lead to poor

IUCN Level 2 Threat Name: Fishing and Harvesting of Aquatic Resources

Notes: Fishing for demersal fish species, scallops, etc; dragging may alter benthic habitat; overfishing is also an issue in some cases

IUCN Level 2 Threat Name: Garbage and Solid Waste

Notes: Lost fishing gear, discarded plastics, boat mechanic fluid containers (oil, antifreeze). Sometimes can be retrieved (ghost gear programs), but is generally lost especially if offshore.

IUCN Level 2 Threat Name: Habitat Shifting or Alteration

Notes: Chemical changes in water chemistry (e.g. ocean acidification) can affect biological communities and natural processes

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Notes: Chemical changes in water chemistry (e.g. Ocean acidification) can affect biological communities and natural processes

IUCN Level 2 Threat Name: Industrial and Military Effluents

Notes: Release of effluents may contain high concentrations of toxic contaminants, etc. largely effects nearshore habitat, where impact can be long term. Oil spills can effect nearshore or offshore environments and can be either localized (if contained or small)

IUCN Level 2 Threat Name: Invasive Non-native-Alien Species-Diseases
IUCN Level 2 Threat Name: Recreational Activities

Notes: Fishing for demersal fish species, scallops, etc; overfishing is also an issue in some cases

IUCN Level 2 Threat Name: Renewable Energy

Notes: Mounting equipment and transmission cables for floating offshore wind turbines. Also proposed tidal barrages and other hydropower or tidal power structures can block marine organisms.

IUCN Level 2 Threat Name: Shipping Lanes

Notes: Dredging associated with harbors

IUCN Level 2 Threat Name: Temperature Extremes

Notes: Sea surface temperature increases may change the community structure; exacerbate disease, etc.

Habitat Conservation Actions:

Relevant conservation actions for this habitat are assigned within broader habitat groupings in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Species Conservation Actions:

Conservation actions that may benefit species associated with this habitat can be found in Maine's 2015 Wildlife Action Plan: Element 1, Table 1-3. Click on the species of interest to launch a species based report summarizing relevant conservation actions and associated habitats.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.